

IN THE CLAIMS

1. (Currently Amended) A power supply device for supplying a stabilized output DC voltage to an electronic equipment having a controller for controlling said electronic equipment, said power supply, comprising:

a rectification section for rectifying an input AC voltage;

a primary side capacitor for smoothing an output voltage from said rectification section;

a switching power supply section for receiving a DC voltage from said primary side capacitor as an input DC voltage at a primary side thereof, switching the inputted DC voltage and generating [[a]] said stabilized output DC voltage at a secondary side thereof isolated from the primary side;

a current detection section comprising a current detector, and a photo-coupler having a photodiode connected parallel to said current detector via a resistor and a phototransistor supplied by said stabilized output DC voltage via a resistor, wherein said photodiode is current detector connected between said rectification section and said primary side capacitor for detecting of said switching power supply section detects a supply current supplied from said rectification section, and generates a voltage enough for turning on said photodiode, and wherein said phototransistor for generating generates a detection synchronization signal [[is]] isolated from said primary side in response to said detected supply current turning on of said photodiode and for conveying the detection signal to an equipment connected to the secondary side of said switching power supply section; and

a control section monitors said synchronization signal outputted from said current detection section, generates a detection signal when said synchronization signal stops for more than a predetermined period of time, and outputs said detection signal to said controller;

wherein said controller of said electronic equipment performs an operation ending process of said operation circuit in response to the detection signal from said control section.

Claims 2-4. (Canceled)

5. (Currently Amended) An electronic equipment having a power supply for converting an input AC voltage into an output DC voltage, an operation circuit for operating using the output DC voltage outputted from said power supply as a voltage source, and a controller for controlling said operation circuit, said power supply, comprising:

a rectification section for rectifying an input AC voltage;  
a primary side capacitor for smoothing an output voltage from said rectification section;  
a switching power supply section for receiving a DC voltage from said primary side capacitor as an input DC voltage at a primary side thereof, switching the inputted DC voltage and generating a stabilized output DC voltage at a secondary side thereof isolated from the primary side;

a current detection section comprising a current detector, and a photo-coupler having a photodiode connected parallel to said current detector via a resistor and a phototransistor supplied by said stabilized output DC voltage via a resistor, wherein said photodiode current detector [[is]] connected between said rectification section and said primary side capacitor for detecting of said switching power supply section detects a supply current supplied from said rectification section, and generates a voltage enough for turning on said photodiode, wherein said phototransistor for generating generates a detection synchronization signal [[is]] isolated from said primary side in response to said detected supply current turning on of said photodiode;

~~an operation circuit for operating using the output DC voltage outputted from said switching power supply section as a voltage source; and~~  
~~a control section for operating using the output DC voltage outputted from said switching power supply section as a voltage source to control said operation circuit;~~  
wherein said control section performing controller performs an operation ending process of said operation circuit in response to the detection signal ~~from said photo-coupler from said control section.~~

Claims 6-8. (Canceled)